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U. S. DEPT. OF AGRICULTURE  
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JUL 2 2 1964

**WATER SUPPLY OUTLOOK** CURRENT SERIAL RECORDS  
and  
**FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**  
for  
**WYOMING**

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,  
and  
STATE ENGINEER of WYOMING

Data included in this report were obtained by the agencies  
named above in cooperation with the Bureau of Reclamation,  
U.S. Forest Service, National Park Service, and other Federal,  
State and private organizations.

AS OF  
MAR. 1, 1964

# UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

## To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

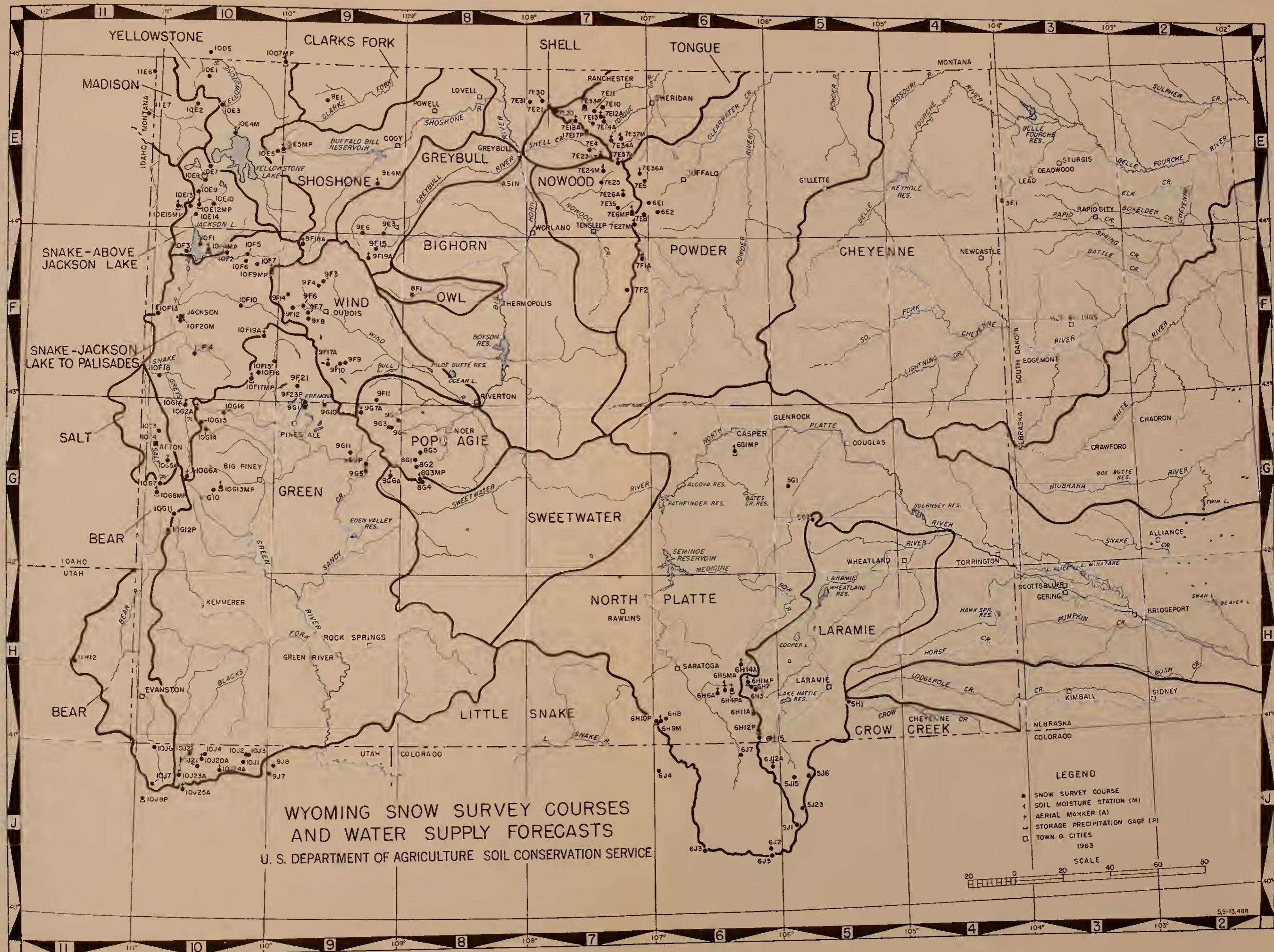
Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 2807, Portland, Oregon 97208.

## PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
<b>RIVER BASINS</b>			
WESTERN UNITED STATES			
MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS	
BASIC DATA SUMMARY			
OCTOBER 1	PORTLAND, OREGON	ALL COOPERATORS	
<b>STATES</b>			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE-UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

## PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.



3/11/58  
INDEX TO WYOMING SNOW COURSES

DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	LOCATION				RANGE LONG.	RECORD BEGAN	MEAS. DATES a	MEAS. BY b	DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	LOCATION				RANGE LONG.	RECORD BEGAN	MEAS. DATES a	MEAS. BY b	DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	LOCATION				RANGE LONG.	RECORD BEGAN	MEAS. DATES a	MEAS. BY b								
		SEC.	ELEV.	LAT.	TWP.							SEC.	ELEV.	LAT.	TWP.	SEC.	ELEV.	LAT.	TWP.	SEC.	ELEV.	SEC.	ELEV.	LAT.	TWP.	SEC.	ELEV.	LAT.	TWP.	SEC.	ELEV.	LAT.	TWP.				
MISSOURI RIVER DRAINAGE																																					
POWDER RIVER																																					
Norris Basin	10E2	7500	44 44'	110 42'	1936	2,3,4,5	2	Bear Trap	7F1A	8000	10	15N	85W	1960	2,3,4,5	1	Arlizon	10F1	6850	35	16N	115W	1919	2,3,4	5												
21 Mile m	11E6	7150	1	11S 5E	1934	1,2,3,4,5	1	Canyon Creek	7F2	7100	16	14N	86W	1960	2,3,4,5	1	Astor Creek	10E8	7700	14 17'	16N	110 37'	1919	2,3,4	5												
West Yellowstone m	11E7	6700	34	13S 5E	1934	1,2,3,4,5	1	Clouds Peak	7E36A	10000	15	51N	85W	1960	2,3,4	1	Base Camp	10F2	6900	20	16N	113W	1947	2,3,4	5												
YELLOWSTONE																																					
Canyon	10E3	7750	44 44'	110 30'	1938	1,2,3,4,5	1	County Line	7E6MP	8200	1	16N	86W	1956	2,3,4,5	1	Coulter Creek	10E10	7600	14 09'	110 33'	1919	2,3,4	2													
Cooke City m	1007MP	7400	33	95 14E	1937	1,2,3,4,5	2	Muddy Creek G.S.	6E2	7800	2	16N	84W	1950	2,3,4,5	1	Glade Creek	10E13	7200	14 08'	110 44'	1919	2,3,4	5													
Crevice Mountain m	1005	8400	22	95 9E	1935	3,4	4	Munkres Pass	7E8	9700	11	16N	85W	1956	2,3,4,5	1	Grassy Lake	10E15MP	7265	6	14N	116W	1940	2,3,4,5	5												
East Entrance	9E5MP	7000	44 29'	110 00'	1948	1,2,3,4,5	2	Onion Gulch	7E27M	8100	31	16N	85W	1956	2,3,4,5	1,6	Huckleberry Olived	10E14	7300	32	14N	115W	1919	2,3,4	5												
Lake Camp #1, #2	10E4#	7850	44 34'	110 24'	1937	1,2,3,4,5	1	Soldier Park	7E5	8700	36	51N	85W	1950	2,3,4,5	1,6	Lewis Lake Olived	10E9	7900	17	14N	114W	1919	2,3,4,5	5												
Lupine Creek	10E1	7300	44 54'	110 37'	1938	1,2,3,4,5	2	Sour Dough	6E1	8500	17	16N	84W	1936	2,3,4,5	1	Moran	10F4MP	6800	17	14N	114W	1919	2,3,4	5												
Thumb Divide	10E7	7900	44 22'	110 35'	1946	2,3,4	5	SWEETWATER																													
Sylvan Pass	10E5	7100	44 28'	110 02'	1936	1,2,3,4,5	2	Grannier Meadows	8G4	9000	19	30N	100W	1937	2,3,4,5	1	MISSOURI RIVER DRAINAGE																				
CLARK'S FORK																																					
Lodgepole	9E1	8200	32	56N	106W	1940	2,3,4,5	1,4	LARAMIE RIVER																												
WIND RIVER																																					
Big Horn	9F12	8800	36	12N	109W	1955	2,3,4,5	1	Brooklyn Lake #2	6H1NP	10200	11	16N	79W	1956	2,3,4,5	1	Afton R. S.	10E4	6200	30	32N	118W	1936	1,2,3,4,5	4											
Burroughs Creek	9F4	8800	15	43N	107W	1948	2,3,4,5	1	Cameron Pass c	5J1	10285	2	6N	76W	1950	2,3,4,5	1	Blackrock	10F7	8600	4	44N	111W	1936	2,3,4	5											
Dinwoodie	9F10	10000	8	3N	6W	1948	2,3,4,5	1,3	Deadman Hill c	5J6	10200	26	10N	75W	1937	3,4,5	1	Blind Bull Summit	10E2A	8750	6	34N	115W	1948	2,3,4	5											
Oinwoodie Glaciers	9F17A	10500	43 16'	109 38'	1959	2,3,4	1	Foxpark	6H12P	9200	21	13N	78W	1936	2,3,4,5	4	Bryan Flat	10F14	6250	9	38N	115W	1936	1,2,3,4,5	1												
Dry Creek	9F9	9500	10	3N	6W	1948	2,3,4,5	1,3	Hairpin Turn #3	6H2	9500	24	16N	79W	1936	2,3,4,5	1	CCC Camp	10E7	7500	9	29N	118W	1936	1,2,3,4,5	1											
DUNoir	9F6	8750	27	12N	108W	1940	2,3,4,5	1	Libby Lodge #2	6H3	8700	29	16N	78W	1936	2,3,4,5	1	Cottonwood Lake	10E5A	6534	32	35N	116W	1936	2,3,4	5											
Geyser Creek	9F7	8500	12	41N	108W	1948	2,3,4,5	1	Lost Lake c	5J23	9300	32	8N	75W	1949	2,3,4,5	1	Deadman Ranch	10E1A	651A	32	35N	111W	1936	1,2,3,4,5	1											
Little Warm	9F8	9500	24	41N	108W	1948	2,3,4,5	1	McIntyre c	5J15	9100	35	10N	76W	1949	2,3,4,5	1	East Rim Olived	10F17MP	7950	32	37N	111W	1936	1,2,3,4,5	1											
Sheridan R.S. #2	9F14	7500	3	42N	109W	1955	2,3,4,5	1	Pole Mountain #2	5H1	8700	35	15N	72W	1936	2																					

FEDERAL STATE COOPERATIVE  
SNOW SURVEYS AND WATER FORECASTS  
FOR  
WYOMING

Issued  
March 1, 1964

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## WATER SUPPLY OUTLOOK

FOR

**WYOMING**

The anticipated summer water supplies, by river basins, are as follows:

THE NORTH PLATTE - The April 1 to September 30 runoff is forecast at 66 percent of average at Northgate, Colorado; a yield of 67 percent from the Encampment River watershed; and 80 percent from the Snowies, for a discharge of 72 percent, or 478,000 acre feet at Saratoga, Wyoming.

The Laramie River watershed, measured at Jeelm, Wyoming, is expected to release 75 percent of the average runoff.

Reservoir storage on the North Platte Basin is at 70 percent of the March 1 average and 25 percent of usable capacity. Wheatland Reservoir, on the Laramie River is 78 percent of normal, and 19 percent of its 95,000 acre foot capacity. Total runoff and storage supplies will be 70 percent on the North Platte system and 71 percent at Wheatland Reservoir.

THE COLORADO RIVER is down to a computed runoff of 82 percent at Warren Bridge. North Piney is expected to discharge 80 percent; the New Fork will release 83 percent at Boulder, Wyoming. Big and Little Sandy Creeks are standing at 84 percent of normal. The combined flow at Green River, Wyoming, will be 984,000 acre feet or 82 percent of average.

THE LOWER YELLOWSTONE BASIN snow surveys indicate a seasonal runoff of 80 percent for the Wind River at Dubois; 86 percent into Bull Lake; 80 percent from the North Popo Agie watershed and 84 percent out of the Little Popo Agie. Bull Lake Reservoir contents are two-thirds of capacity and 162 percent of normal. Boysen Reservoir is 66 percent of the average contents for



March 1. From the west flank of the Big Horns, close to average flows are expected.

The Shoshone River inflow to Buffalo Bill Reservoir will be 680,000 acre feet or 80 percent of normal. Current storage is 151,100 acre feet, or 64 percent of normal. Combined storage and runoff will be 76 percent of the average summer supply.

THE COLUMBIA RIVER BASIN WATERSHED in Wyoming will discharge 78 percent into Jackson Lake; the Palisades Reservoir will receive 79 percent from the Snake River, 89 percent from the Grey's River, and 87 percent from the Salt River. Total runoff and storage supplies at the State line are expected to be 4,375,000 acre feet of water.

THE BEAR RIVER DRAINAGE is down to a projected 75,000 acre feet of summer runoff at the Wyoming-Utah Line, which is 61 percent of average. From the north, the Smith's Fork is expected to do considerably better. Snow melt runoff from this watershed is forecast at 105,000 acre feet or 88 percent of the fifteen year average.



## WYOMING STREAM-FLOW FORECASTS - MARCH 1, 1964

BASIN AND TRIBUTARY	April 1 to September 30			
	Seasonal Forecast Runoff	Stream-Flow in Thousands of Acre Feet		
		% 15-Year Average	Measured Runoff	
			1962	15-Yr. Avg. 1943-57
LITTLE POPO AGIE Lander (near)	36	84%	45	43*
NORTH POPO AGIE Milford (near)	69	80%	91	74*
BULL LAKE CREEK Lenore (near)	147	86%	203	170*
WIND RIVER DuBois (near)	80	80%	108	100*
TENSLEEP CREEK Tensleep (near)	66	83%	95	80
MEDICINE LODGE CREEK Hyattville (near)	19.3	99%	22	19.4
SHELL CREEK Shell (near)	62	97%	80	64
SHOSHONE RIVER Buffalo Bill Dam (below) (1)	680	80%	603	851
LARAMIE RIVER Jelm (near)	79	70%	140	113
ENCAMPMENT RIVER Encampment (near)	105	67%	131	156
NORTH PLATTE RIVER Northgate (near) Saratoga (at)	168 478	66% 72%	433 975	255 661
MEDICINE BOW RIVER Hanna (near)	74	75%	145	99

All stream data taken from observed flow records with the following exceptions:

- (1) Observed flow corrected for Buffalo Bill storage and Heart Mountain diversion.  
 (2) Observed flow corrected for Jackson Lake storage.

\* Less than 15 years of record.



WYOMING STREAM-FLOW FORECASTS - MARCH 1, 1964

BASIN AND TRIBUTARY	April 1 to September 30				
	Seasonal Stream-Flow in Thousands of Acre Feet				
	Forecast Runoff	% 15-Year Average	Measured Runoff 1962	15-Yr. Avg. 1943-57	
<b>GREEN RIVER</b>					
Warren Bridge (at)	284	82%	373	348	
Fontenelle (near)	806	82%	1122	983*	
Green River, Wyo. (at)	984	82%	1196	1200	
<b>NORTH PINEY CREEK</b>					
Mason (at)	33	80%	39	41	
<b>NEW FORK RIVER</b>					
Boulder (near)	216	83%	263	261	
<b>BIG SANDY CREEK</b>					
Big Sandy (near)	50	84%	63	59	
<b>LITTLE SANDY CREEK</b>					
Elkhorn (near)	12.6	84%	15	15	
<b>SNAKE RIVER</b>					
Moran (at) (2)	720	78%	933	928	
<b>PACIFIC CREEK</b>					
Moran (near)	144	78%	118	185*	
<b>SNAKE RIVER</b>					
Palisades (above)	2180	79%	2919	2758*	
<b>GREY'S RIVER</b>					
Palisades (above)	339	84%	438	403	
<b>SALT RIVER</b>					
Etna (above Palisades)	313	87%	389	360	
<b>BEAR RIVER</b>					
Utah-Wyo State Line (near)	75	61%	142	123	
<b>SMITH'S FORK</b>					
Border (near)	105	88%	142	119	
<b>MADISON RIVER</b>					
West Yellowstone (near)	184	85%	115	216	
<b>CLARK'S FORK</b>					
Chance (at)	525	85%	622	617	
<b>LITTLE SNAKE</b>					
Dixon (at)	212	67%	385	316	



WYOMING SNOW SURVEYS - ABOUT MARCH 1, 1964

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			1964		PAST RECORD		Water Content (In.)	
			Date of Survey	Snow Depth (In.)	Water Content (In.)			1943-57 Avg.
<u>MADISON RIVER - YELLOWSTONE PARK</u>								
Norris Basin $\frac{1}{2}$	10E2	7500	2/27	38	8.4	8.1	9.9	9.3e
21 Mile <sup>m</sup>	11E6	7150	2/28	49	14.1	7.6	19.0	16.0
West Yellowstone <sup>m</sup>	11E7	6700	2/28	33	8.3	4.9	15.0	13.3
<u>UPPER YELLOWSTONE - YELLOWSTONE PARK</u>								
Canyon	10E3	7750	2/28	44	12.4	10.2	16.3	13.8e
Northeast Entrance <sup>m</sup>	10D7MP	7400	2/28	30	7.4	7.5	8.1	7.5
Crevice Mountain <sup>m</sup>	10D5	8400	2/26	36	8.1	7.1	N.R.	8.2
East Entrance $\frac{1}{2}$	9E5MP	7000	2/28	32	8.3	8.0	8.9	10.8e
Lake Camp #1	10E1 $\frac{1}{2}$	7850	2/27	34	7.1	4.9	12.0	10.1
Lake Camp #2	10E4	7850	2/27	31	6.3	4.4	11.2	8.9e
Lupine Creek	10E1	7300	2/26	33	8.2	5.4	12.4	9.4e
Norris Basin $\frac{1}{2}$	10E2	7500	2/27	38	8.4	8.1	9.9	9.3e
Sylvan Pass $\frac{1}{2}$	10E5	7100	2/28	37	10.	8.6	10.5	13.4e
Thumb Divide $\frac{1}{2}$	10E7	7900	2/26	50	14.0	12.8	24.5	21.4e
<u>LOWER YELLOWSTONE - CLARK'S FORK</u>								
Lodgepole	9E1	8200	2/28	34	9.1	8.7	9.7	10.6e
<u>LOWER YELLOWSTONE - WIND RIVER</u>								
Big Warm	9F12	8800	2/18	27	4.8	8.5	10.3	9.9e
Burroughs Creek	9F4	8800	2/20	34	8.7	12.0	13.7	14.2e
Dinwoodie	9F10	10000	2/23	30	6.6	7.0	13.0	10.1e
Dinwoodie Glaciers	9F17A	10500	2/26	39	7.5A	7.0A		
Dry Creek	9F9	9500	2/23	20	4.1	3.8	7.1	5.2e
DuNoir	9F6	8750	2/18	22	4.7	7.7	10.5	7.8
Geyser Creek	9F7	8500	2/19	19	4.3	7.1	8.6	7.5e
Little Warm	9F8	9500	2/19	42	10.5	12.3	18.2	14.3e
Sheridan R.S. #2	9F14	7500	2/18	20	3.8	6.7	8.5	7.7e
T-Cross Ranch	9F3	8000	2/20	16	4.0	6.5	6.9	6.8
Togwotee Pass $\frac{1}{2}$	10F9MP	9600	2/26	70	22.1	22.0	28.3	26.0e
Twenty Lakes $\frac{1}{2}$	9G7A	10000	2/26	26	6.0A	7.0A		
<u>LOWER YELL OWSTONE - OWL CREEK</u>								
Kirwin $\frac{1}{2}$	9F19A	10000	N.R.			4.0A	10.0A	
Owl Creek	8F1	8700	N.R.			4.1	5.1	5.5e



WYOMING SNOW SURVEYS - ABOUT MARCH 1, 1964

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					PAST RECORD		
			Date of Survey	Snow Depth (In.)	Water Content (In.)	1964		Water Content (In.)	1963	1962
						1963	1962			
<u>LOWER YELLOWSTONE - POPO AGIE RIVER</u>										
Blue Ridge	8G2	9500	2/27	38	9.2	9.1	11.4	11.0e		
Bruce's Camp	8G5	6500	2/28	24	4.6	3.7	2.3	3.5e		
Hobbs Park	9G3	10000	2/25	48	11.0	9.0	17.5	16.6e		
Mosquito Park R.S.	9G4	9500	2/25	32	6.1	4.2	9.1	7.3e		
Sawmill Glade	8G1	8500	2/28	34	8.1	5.5	8.6	6.9		
South Pass $\frac{1}{2}$	8G3MP	9000	2/27	39	9.3	11.4	14.1	13.2		
St. Lawrence R.S.	9F11	9000	2/24	24	5.3	3.5	8.9	6.0e		
Trout Creek	9G2	8400	2/25	31	4.9	2.6	5.1	6.7e		
Twenty Lakes $\frac{1}{2}$	9G7A	10000	2/26	26	6.0A	7.0A	N.R.			
<u>LOWER YELLOWSTONE - GREYBULL RIVER</u>										
Frontier Needle	9E6	10000		N.R.			4.0A			
Kirwin $\frac{1}{2}$	9F19A	11000		N.R.			4.0A	10.0A		
Timber Creek #2	9E3	8800	3/1	12	2.7	2.5	4.3	2.8a		
Wood River #2	9F15	8000	3/1	22	4.6	4.2	6.4	4.2a		
<u>LOWER YELLOWSTONE - SHOSHONE RIVER</u>										
Carter Mountain	9E4M	7800	2/26	14	2.8	3.3	5.0	3.7a		
East Entrance $\frac{1}{2}$	9E5MP	7000	2/28	32	8.3	8.0	8.9	10.8e		
Sylvan Pass $\frac{1}{2}$	10E5	9200	2/28	37	10.2	8.6	10.5	13.4e		
Togwotee Pass $\frac{1}{2}$	10F9MP	9600	2/26	70	22.1	22.0	28.3	26.0e		
Younts Peak	9F18A	8500		N.R.			N.R.	N.R.		
<u>LOWER YELLOWSTONE - NOWOOD CREEK</u>										
Bear Trap $\frac{1}{2}$	7F1A	8000	2/25	39	9.5A	8.8e	11.3			
Canyon Creek $\frac{1}{2}$	7F2	7400	3/3	43	9.4	8.9	10.8			
Cold Springs Camp	7E25	8700	2/27	32	6.6	6.9	8.0	6.3a		
Medicine Lodge Lakes	7E24M	9500	2/27	41	9.7	9.8	13.2	8.2a		
Munkres Pass $\frac{1}{2}$	7E8	9700	3/1	31	6.9	6.6	13.0	6.7e		
Onion Gulch $\frac{1}{2}$	7E27M	8100	2/29	35	8.3	8.6	12.3	8.2a		
Tyrell R.S.	7E35	8300	2/29	34	8.1	8.5	9.8	5.5e		
West Tensleep Lake	7E26A	9075	2/25	45	11.5A	11.5A	15.5A			



WYOMING SNOW SURVEYS - ABOUT MARCH 1, 1964

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			1964		Water Content (In.)	PAST RECORD		
			Date of Survey	Snow Depth (In.)		1963	1962	1943-57 Avg.
<u>LOWER YELLOWSTONE - SHELL CREEK</u>								
Bald Mountain ♫	7E21M	9600	2/26	74	20.5	19.9	22.9	17.1a
Beaver Tongue ♫	7E20	9200	2/26	62	16.5	17.2	19.7	15.8a
Bone Spring Divide ♫	7E18A	9200	2/25	50	12.5A	14.5A	18.5A	14.8a
Granite Pass ♫	7E17P	8950	2/28	49	13.5	12.9	17.7	13.5a
Ranger Creek	7E4	8800	2/28	36	9.4	8.6	10.3	7.0e
Shell Creek	7E23A	9600	2/25	48	12.0A	15.5A	18.5A	12.7a
<u>LOWER YELLOWSTONE - PORCUPINE CREEK</u>								
Five Springs Falls	7E31	7500	2/28	35	8.2	9.2	5.2	5.3a
Medicine Wheel	7E30	9000	2/26	58	15.5	16.6	14.1	13.7a
<u>LOWER YELLOWSTONE - TONGUE RIVER</u>								
Beaver Tongue ♫	7E20	9200	2/26	62	16.5	17.2	19.7	15.8a
Big Goose #2	7E32M	7700	2/29	30	6.8	6.2	9.2	6.5a
Bone Spring Divide ♫	7E18A	9200	2/25	50	12.5A	14.5A	18.5A	14.8a
Burgess R.S. #2	7E33P	7900	2/27	43	9.9	7.2	7.1	6.4a
Dome Lake #2	7E34A	8800	2/25	35	8.5A	8.5A	10.5A	8.1a
Geneva Pass	7E37A	10600	2/25	54	14.0A	16.5A	18.0A	
Gloom Creek	7E14A	9300	2/25	59	15.5A	16.5A	14.5A	12.1a
Granite Pass ♫	7E17	8950	2/28	49	13.5	12.9	17.7	13.5a
North Tongue	7E15	8800	2/27	47	11.9	10.8	12.2	
Sibley Lake	7E11	8000	2/28	53	12.6	10.6	11.5	9.0a
Steamboat Point	7E10	7500	2/28	40	9.6	6.9	8.2	6.3a
Sucker Creek	7E12A	9000	2/25	56	14.5A	14.0A	13.0A	10.9a
Wood Rock G.S.	7E13	8500	2/28	42	9.5	9.4	11.5	8.8a
<u>LOWER YELLOWSTONE - POWDER RIVER</u>								
Bear Trap ♫	7F1A	8000	2/25	39	9.5A	8.8e	11.3	
Canyon Creek ♫	7F2	7400	3/3	43	9.4	8.9	10.8	
Cloud's Peak	7E36A	10000	2/25	39	9.5A	9.0A	13.5A	
Muddy Creek G.S.	6E2	7500	3/2	12	2.4	3.0	5.1	4.0a
Munkres Pass ♫	7E8	9700	3/1	31	6.9	6.6	13.0	6.7e
Onion Gulch ♫	7E27M	8100	2/29	35	8.3	8.6	12.3	8.2a
Soldier Park	7E5	8700	3/1	21	4.1	4.3	7.1	4.5e
Sour Dough	6E1	8500	3/2	28	5.3	4.9	9.3	5.8e



WYOMING SNOW SURVEYS - ABOUT MARCH 1, 1964

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			1964		Water Content (in.)	PAST RECORD		
			Date of Survey	Snow Depth (in.)		1963	1962	1943-57 Avg.
<b>NORTH PLATTE - LARAMIE RIVER</b>								
Albany $\frac{1}{2}$	6H11A	9400	2/28	44	12.0A	N.R.	N.R.	11.9e
Brooklyn Lake #2	6H1MP	10200	2/26	49	13.2	14.1	22.5	18.5e
Cameron Pass <sup>c</sup> $\frac{1}{2}$	5J1	10300	2/28	66	19.1	14.6e	N.R.	18.0
Chambers Lake <sup>c</sup>	5J2	9000	2/29	23	4.8	7.4	10.3	7.0
Deadman Hill <sup>c</sup>	5J6	10300	2/28	52	13.0	N.R.		12.2
Evans $\frac{1}{2}$	6H15	9000	2/26	31	7.1	6.5	14.9	
Foxpark $\frac{1}{2}$	6H12P	9200	3/2	23	5.6	6.6	10.7	5.2
Hairpin Turn #2	6H2	9500	ABANDONED			8.0	12.3	10.2
Hairpin Turn #3	6H2	9500	2/26	36	9.3	10.4	15.1	13.4
LaBonte $\frac{1}{2}$	5G2	8450	2/26	23	5.0	2.3	4.8	5.5e
Libby Lodge	6H3	8700	2/26	27	6.3	7.8	10.4	9.2
Lost Lake	5J23	9300	2/29	29	6.4	9.1	N.R.	10.4
Pole Mountain #2 $\frac{1}{2}$	5H1	8700	3/2	21	4.1	2.0	4.8	4.4
Roach $\frac{1}{2}$	6J12A	9800	2/23	42	7.9	N.R.	N.R.	15.7
Rock Creek $\frac{1}{2}$	6H14A	9800	3/3	74	21.2	18.5	N.R.	
<b>NORTH PLATTE - ABOVE SEMINOE RESERVOIR</b>								
Albany $\frac{1}{2}$	6H11A	9400	2/28	44	12.0A	N.R.	N.R.	11.9e
Bottle Creek	6H8	8600	2/29	33	8.7	9.7	15.3	12.2
Boxelder #2 $\frac{1}{2}$	5G1	7500	3/5	36	8.0	5.2	7.2	
Cameron Pass <sup>c</sup> $\frac{1}{2}$	5J1	10300	2/28	66	19.1	14.6e	N.R.	18.0
Casper Mountain $\frac{1}{2}$	6G1MP	7940	2/28	45	11.6	9.2	14.8	
Columbine <sup>c</sup>	6J3	9300	2/26	53	14.1	17.3	26.4	19.6
Evans $\frac{1}{2}$	6H15	9000	2/26	31	7.1	6.5	14.9	
Foxpark $\frac{1}{2}$	6H12P	9200	3/2	23	5.6	6.6	10.7	5.2
LaBonte $\frac{1}{2}$	5G2	8450	2/26	23	5.0	2.3	4.8	5.5e
North Barrett Creek	6H5AM	9400	2/28	63	19.0A	N.R.	N.R.	14.6
North French Creek	6H4AP	10200	2/28	66	20.0A	N.R.	N.R.	23.0
Northgate <sup>c</sup>	6J7	8500	2/27	21	4.0	3.4	9.1	
Old Battle $\frac{1}{2}$	6H10P	9800	2/29	60	18.0	19.5	31.2	25.8
Park View <sup>c</sup> $\frac{1}{2}$	6J2	9200	2/27	24	5.2	5.8	11.7	7.7
Roach <sup>c</sup> $\frac{1}{2}$	6J12A	9800	2/23	42	7.9	N.R.	N.R.	15.7
Rock Creek $\frac{1}{2}$	6H14A	9800	3/3	74	21.2	18.5	N.R.	
Ryan Park	6H6A	8400	2/28	26	6.0A	N.R.	N.R.	8.7
Webber Springs <sup>c</sup>	6H9M	9000	2/29	40	10.4	13.0	18.7	15.5
Willow Creek Pass	6J5	9500	2/27	29	6.4	8.3	15.5	10.8



WYOMING SNOW SURVEYS - ABOUT MARCH 1, 1964

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			1964		PAST RECORD			
			Date Of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1963	1962
<u>NORTH PLATTE - CROW CREEK</u>								
Pole Mountain #2 ♀	5H1	8700	3/2	21	4.1	2.0	4.8	4.4
<u>NORTH PLATTE - SWEETWATER</u>								
Grannier Meadows	8G4	9000	2/27	40	9.6	9.9	14.4	13.1
Larsen Creek	9G6A	9000	2/26	25	6.0A	N.R.	13.9	10.3e
South Pass ♀	8G3MP	9000	2/27	39	9.0	11.4	14.1	13.2
<u>NORTH LARAMIE MOUNTAINS</u>								
Boxelder #2 ♀	5G1	7500	3/5	36	8.0	5.2	7.2	
Casper Mountain ♀	6G1MP	7940	2/28	45	11.6	9.2	14.8	
LaBonte ♀	5G2	8450	2/26	23	5.0	2.3	4.8	5.5e
<u>GREEN RIVER ABOVE GREEN RIVER</u>								
Big Sandy Opening	9G9P	9220	2/24	36	8.4	7.9	14.2	
Blind Bull Summit ♀	10G2A	8750	2/26	54	16.5A	14.0A	29.5A	28.4e
Dutch Joe R.S.	9G5	8700	2/24	28	6.7	5.4	12.6	7.3e
East Rim Divide ♀	10F17MP	7950	2/27	32	7.4	5.8	11.8	10.5
Elk Heart Park G.S.	9F23P	9400	2/27	43	9.7	10.0	16.9	
Gros Ventre ♀	10F19A	8750	2/26	34	8.0A	8.0A	15.0A	12.5e
Kendall R.S. #1	10F15	7900	2/29	26	6.7	6.5	12.7	10.5
Kendall R.S. #2	10F15	7900	2/29	30	7.9	9.0	17.1	
Loomis Park #1	10F16	8500	2/27	42	11.2	13.8	19.5	15.9
Loomis Park #2	10F16	8500	2/27	43	12.2	14.5	20.3	
Mulligan Park	9G1	8900	2/28	33	7.6	7.9	13.2	9.6
New Fork Lake	9F21	8325	2/29	34	8.4	9.0	13.6	
North Horse Creek	10G16	8200	2/27	50	15.0	15.2	24.5	
Piney LaBarge #1	10G10	8820	2/25	44	13.4	15.6	23.1	18.0e
Piney LaBarge #2	10G10	8820	2/25	51	16.1	19.7	27.6	
Pocket Creek	9G11	9360	2/26	33	7.9	6.8	16.2	
Poison Meadows ♀	10G6A	8500	2/26	61	19.0A	21.0A	34.0A	
Snyder Basin #2	10G13MP	8040	2/25	41	12.0	13.0	19.2	14.1e
Soda Lake	10G14	8300	2/26	40	11.1	11.8	19.0	18.3e
South Pass ♀	8G3MP	9000	2/27	39	9.3	11.4	14.1	13.2
Triple Peaks	10G15	8500	2/26	54	17.4	17.4	27.6	26.2e



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Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS			PAST RECORD		
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1943-57	
				1963	1962	Avg.		
<b>GREEN RIVER - BELOW GREEN RIVER</b>								
Lake Fork Basin	10J25A	11100	2/27	60	13.8	N.R.		
Big Park +	10G11A	8700	2/24	49	14.1	14.1	23.5A	
Buck Pasture u	10J23A	9700	2/26	36	8.0	7.5A	N.R.	
Elk River c	6J4	8700	2/28	56	15.1A	8.5	22.0A	15.1
Henry's Fork u	10J24A	10200	2/26	37	8.1	5.9A	N.R.	
Old Battle +	6H10P	9800	2/29	60	18.0	19.5	31.2	25.8
Steel Creek Park u	10J20A	9900	2/19	44	9.4	6.5	N.R.	
Kelly R.S.	10G12	8200	2/24	46	13.6	11.9	16.9	
Black's Fk. Junction	10J22	8925	2/18	26	5.2	4.7	8.6	
East Fk. Black's Fk.	10J21	9300	2/18	29	6.6	5.3	9.7	
Hewinta G.S.	10J4	9500	2/19	27	5.7	5.7	8.3	8.5e
Hickerson Park	9J8	9100	2/26	23	4.5	N.R.		
<b>JACKSON LAKE TO PALISADES</b>								
Afton R.S.	10G4	6200	2/27	21	4.9	T	4.0	4.6
Base Camp +	10F2	6900	2/27	51	15.2	12.0	17.3	18.2e
Blackrock	10F7	8600	2/26	57	16.8	16.8	20.2	19.7
Blind Bull Summit +	10G2A	8750	2/26	54	16.5A	14.0A	29.5A	28.4e
Bryan Flat	10F14	6250	2/27	28	5.8	1.9	11.5	9.4
CCC Camp	10G7	7500	2/27	38	9.6	7.8	11.7	10.4
Cottonwood Lake	10G5A	7500	2/26	50	15.0A	10.5A	19.5A	14.7e
Deadman Ranch	10G1A	6534	2/26	28	6.5A	3.5A	11.0A	
East Rim Divide +	10F17MP	7950	2/27	32	7.4	5.8	11.8	10.5
Four Mile Meadows	10F6	7770	2/26	45	11.8	10.0	13.3	12.0e
Greys Boundary	10E18	5800	2/27	40	11.6	3.3	10.9	10.6
Gros Ventre +	10F19A	8750	2/26	34	8.0A	8.0A	15.0A	12.5e
Grover Park Divide	10G3	7500	2/28	33	9.0	7.4	12.9	10.0
Loomis Park #1 +	10F16	8500	2/27	42	11.2	13.8	19.5	15.9
Loomis Park #2 +	10F16	8500	2/27	43	12.2	14.5	20.3	
Poison Meadows +	10G6A	8500	2/26	61	19.0A	21.0A	34.0A	25.3e
Salt River Summit +	10G8P	7900	2/28	43	12.5	10.4	14.9	13.3e
Snow King Mtn. #3	10F20M	7600	2/28	39	10.0	9.1	17.8	
Teton Pass #2	10F13	8500	2/28	67	26.6	16.0	32.9	31.0
Togwotee Pass +	10F9MP	9600	2/26	70	22.1	22.0	28.3	26.0e
Turpin Meadows	10F5	6930	2/26	38	9.6	7.1	11.4	10.6e
Yellowjacket	10F10	7675	2/28	26	5.3	3.4	N.R.	5.4e



WYOMING SNOW SURVEYS - ABOUT MARCH 1, 1964

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS				PAST RECORD		
			Date of Survey	1964	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1943-57	
				1963	1962	Avg.			
<u>SNAKE RIVER - ABOVE JACKSON LAKE</u>									
Arizona	10F1	6850	2/26	47	14.0	9.8	19.3	17.5e	
Astor Creek	10E8	7700	2/26	62	18.3	17.7	32.0	30.0e	
Base Camp	10F2	6900	2/27	51	15.2	12.0	17.3	18.2e	
Coulter Creek	10E10	7600	2/23	52	16.4	14.0	21.9	21.8e	
Glade Creek	10E13	7200	2/28	50	15.1	11.8	23.4	21.1e	
Grassy Lake	10E15MP	7265	2/28	78	24.4	19.0	34.4	30.6	
Huckleberry Divide	10E14	7300	2/26	49	14.5	10.7	20.1	18.3e	
Lewis Lake Divide	10E9	7900	2/26	79	26.8	23.6	42.4	39.4e	
Moran	10F4Mp	6500	2/27	38	10.1	8.6	12.4	12.0e	
Moran Bay	10F3	6800	2/26	49	16.7	13.1	23.0	20.0e	
Snake River Station	10E12MP	6780	2/26	52	15.0	13.2	20.2	19.5e	
Thumb Divide <sup>‡</sup>	10E7	7900	2/26	50	14.0	12.8	24.5	21.4e	
<u>BEAR RIVER</u>									
Big Park <sup>‡</sup>	10G11A	8700	2/24	49	14.1	14.1	23.5A		
CCC Camp <sup>‡</sup>	10G7	7500	2/27	38	9.6	7.8	11.7	10.4	
Monte Cristo <sup>u</sup>	11H12	8960	2/26	49	14.5	14.8	26.6	22.7e	
Poison Meadows <sup>‡</sup>	10G6A	8500	2/26	61	19.0A	21.0A	34.0A	25.3e	
Salt River Summit	10G8MP	7900	2/28	43	12.5	10.4	14.9	13.3e	
Trial Lake <sup>u</sup>	10J8P	9800	2/28	46	12.1	16.0	26.6	23.4e	
Kelly R.S.	10G12	8200	2/24	46	13.6	11.9	16.9		
<u>MISSOURI - CHEYENNE RIVER</u>									
Upper Spearfish <sup>s</sup>	3E1	6500	2/28	38	8.8	8.2	5.0		
<u>MISSOURI - BELLE FOURCHE</u>									
Warren Peak	4E1P	6400	2/27	47	9.0				
Bearlodge Divide	4E2P	4580	2/27	23	4.3				

- a. Average of all past data.
- e. 1943-57 partially estimated.
- c. Colorado snow courses.
- m. Montana snow courses.
- s. South Dakota snow courses.

- u. Utah snow courses.
- <sup>‡</sup> Located close to divide.
- A. Aerial stadia marker, water content estimated.
- M. Soil moisture stack.
- P. Pearson storage gage.



## STATUS OF WYOMING AND SOUTH DAKOTA RESERVOIR STORAGE - MARCH 1, 1964

BASIN and/or STREAM	RESERVOIR	USABLE CAPACITY 1000's AF	USABLE STORAGE - 1000 Acre Feet			15-Yr. Avg. 1943-57
			1964	1963	1962	
Snake River	Jackson	847.0	631.1	581.7	142.5	465.5
Snake River	Palisades	1,202.0	912.0	1,003.3	605.3	
North Platte	Seminoe	981.1	222.0	307.6	142.7	408.8
North Platte	Pathfinder	1,011.0	145.0	529.1	191.9	505.2
North Platte	Alcova *	30.3	-4.1	-2.4	1.8	3.2
North Platte	Guernsey	39.8	6.5	24.4	22.8	36.8
North Platte	Glendo	786.3	348.2	360.5	320.1	260.6#
Kansas Basin	Bonny	39.9	40.1	39.9	40.5	
Kansas Basin	Swanson Lake	116.1	102.8	127.4	107.1	
Kansas Basin	Enders	36.0	28.2	30.4	39.8	
Kansas Basin	Harry Strunk	33.9	35.4	34.0	37.8	
Kansas Basin	Harlan County	252.9	253.1	367.6	334.2	
Kansas Basin	Cedar Bluff	176.8	170.4	174.1	185.8	
Laramie River	Wheatland	95.0	17.9	52.4	61.8	23.0
Belle Fourche	Belle Fourche	185.2	133.0	160.3	34.6	101.4
Belle Fourche	Keyhole	190.3	70.8	66.7	12.1	5.7#
Shoshone River	Buffalo Bill**	380.3	151.1	168.2	156.1	235.4
Wind River	Boysen	560.0	294.8	340.2	203.3	448.6***
Wind River	Pilot Butte	31.6	15.9	18.5	12.7	13.3
Wind River	Bull Lake	152.0	102.5	94.4	85.6	63.2
Wind River	Sunshine	53.0	39.1	48.5		
Cheyenne River	Angostura	92.0	69.7	83.2	10.9	41.4
Cheyenne River	Deerfield	15.1	14.2	7.3	3.8	12.9
Grand River	Shadehill	84.0	30.3	45.8	26.9	72.4
Green River	Big Sandy	38.3	12.0	10.1	7.0	10.3#
Rapid Creek	Pactola	55.0	54.1	29.1	3.9	

\* Alcova, downstream from Seminoe and Pathfinder includes 160,170 acre feet of storage that is unavailable to the Kendrick Project. In the future, storage in this reservoir will be held at usable capacity (190,500 acre feet).

\*\* Usable capacity is 439,800 acre feet, however, 59,500 acre feet are inactive except in emergency.

\*\*\* Average is for less than 15 years of record in the 1943-57 period.

# All past data.



# Agencies Cooperating in Wyoming Snow Surveys

## FEDERAL

U. S. Department of Agriculture  
Forest Service  
Soil Conservation Service

U. S. Department of Commerce  
Weather Bureau

U. S. Department of the Interior  
Bureau of Reclamation  
Geological Survey  
National Park Service  
Indian Service

## STATE

State Engineer of Wyoming

University of Wyoming  
Natural Resources Research Institute  
Department of Agricultural Engineering

## PRIVATE

Wheatland Irrigation District  
Greybull Valley Irrigation District  
Clouds Peak Soil & Water Conservation District  
Cody Soil & Water Conservation District  
Dubois-Crowheart Soil & Water Conservation District  
Greybull Valley Soil & Water Conservation District  
Lake DeSmet Soil & Water Conservation District  
Laramie Rivers Soil & Water Conservation District  
Little Snake River Soil & Water Conservation District  
Medicine Bow Soil & Water Conservation District  
Pinedale Soil & Water Conservation District  
S & E Soil & Water Conservation District  
Shell Valley Soil & Water Conservation District  
Shoshone Soil & Water Conservation District  
Tongue River Soil & Water Conservation District  
Washakie Soil & Water Conservation District  
Wheatland Soil & Water Conservation District  
Powder River Soil & Water Conservation District  
Pavillion & Wind River Soil & Water Conservation District  
Powell-Clarks Fork Soil & Water Conservation District  
Bridger Valley Soil & Water Conservation District

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